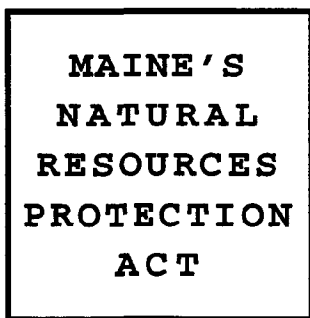


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PROTECTING MAINE'S NATURAL RESOURCES

VOLUME II

THE PERMIT BY RULE PROGRAM



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ACKNOWLEDGMENTS

This guide to preparing a Natural Resources Protection Act (NRPA) permit application was prepared for the Maine Department of Environmental Protection (DEP) by Land & Water Associates of Hallowell, Maine. It is one of a series of four volumes that describe different aspects of the NRPA. Funding was provided, in part, by the U. S. Environmental Protection Agency (EPA) under assistance grant number CD00176001.

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Disclaimer

This guide is for informational purposes only. It offers an explanation of the most important aspects of the Natural Resources Protection Act but is in no way intended to be a substitute for the Act or for the regulations the Board of Environmental Protection has adopted in accordance with the Act.

For a copy of the complete text of both the NRPA and regulations, contact the closest regional DEP Office:

Augusta (Headquarters and Central Maine Regional Office) - (207) 287-2111
or 1-800-452-1942

Portland (Southern Maine Regional Office) - (207) 822-6300

Bangor (Eastern Maine Regional Office) - (207) 941-4570

Presque Isle (Northern Maine Regional Office) - (207) 764-0477

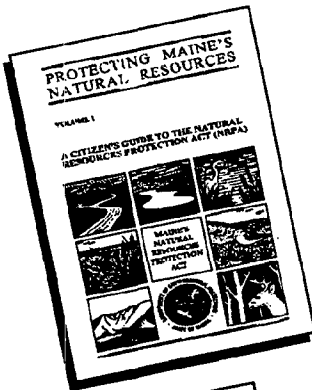
Protecting Maine's Natural Resources:

The Permit by Rule Program

TABLE OF CONTENTS

Acknowledgments	inside cover
The NRPA Guides	ii
INTRODUCTION	1
What is "Permit by Rule"?	1
The Purpose of this Guide	1
How to Use this Guide	1
How to Determine if the PBR Procedure Applies to Your Project	2
Activities Allowed Under the Permit by Rule Procedure	4
How to File Notice Under the Permit by Rule Procedure	7
Other Laws that May Apply	7
PBR SUBMISSION REQUIREMENTS	8
How to Prepare a Site Location Map	8
How to Prepare Photographs of Existing Site Conditions	9
STANDARD TECHNIQUES TO CONTROL EROSION	11
How to Install a Silt Fence or Hay Bale Barrier	11
How to Riprap Steep Slopes and Banks	14
How to Apply and Anchor Mulch, Use Sod, Turf or Erosion-Control Blankets, and Revegetate Disturbed Areas	16
SPECIAL SITUATIONS	20
Working with Pressure-Treated Lumber and Concrete	20
Installing Culverts	21
CASE STUDY	22
A Sample Permit by Rule Notification Document	22
FOR MORE INFORMATION	26

THE NRPA GUIDES

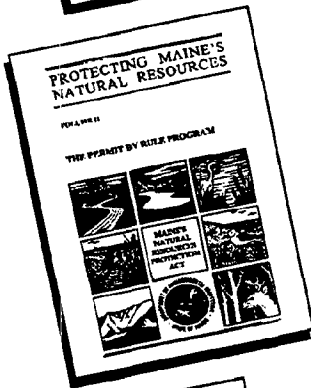


This Citizen's Guide is one of a series of handbooks available from the Maine Department of Environmental Protection. Contact one of the DEP offices listed on the inside of the front cover to obtain a copy of the volume, or volumes, you need.

Protecting Maine's Natural Resources

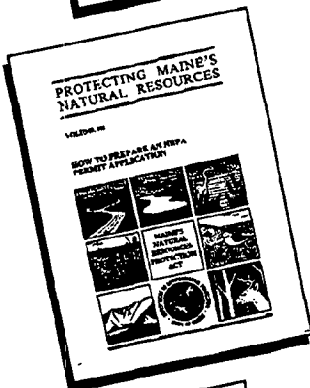
Volume I:

A Citizens Guide to the NRPA provides an overview of the Act and the resources it protects;



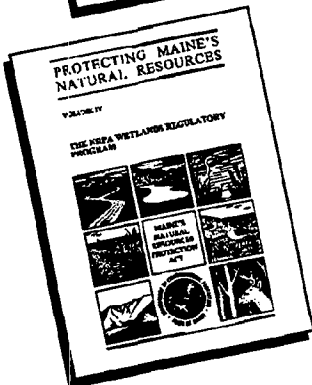
Volume II:

The Permit-by-Rule Program describes the steps an applicant must take to obtain quick approval for minor, non-controversial projects;



Volume III:

How to Prepare an NRPA Application spells out the steps an applicant must take to obtain a permit for a project located in or near a protected natural resource area; and



Volume IV:

The NRPA Wetlands Regulatory Program provides a detailed accounting of how the DEP regulates the alteration of freshwater wetlands.

CASE STUDY

A Sample Permit by Rule Notification Document

Use this example of a completed PBR Notification document as a model for your project submission. You must mail the Notification Form, your application fee, a location map and photographs of the existing site to the DEP for your submission to be considered complete. Provide additional information if possible.

STEP 1: Fill out the PBR Notification Form

- ☐ Obtain this form from one of DEP's offices (see page 28 for addresses and phone numbers).
- ☐ Fill in your name, address, phone, etc.
- ☐ Provide exact instructions on how to find your site.
- ☐ Describe what you plan to do precisely; use additional paper if necessary to describe or illustrate the project. (See over for example.)
- ☐ Refer to Chapter 305 from DEP and determine which topic (section) applies to you; then read the entire section so you know what standards apply to you.
- ☐ Mail this form along with the attachments, via certified mail, to the nearest DEP office listed.

Note: This example form has been reduced in size.

3/92
DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)
PERMIT BY RULE NOTIFICATION FORM
(For use with DEP Regulation, Chapter 305)

PLEASE TYPE OR PRINT IN BLOCK LETTERS. ONLY 11 COPIES, PLEASE REAR DOWN

Name of Applicant: <u>Mr. Roland Public</u>	Nearest County: <u>Mr. John Public</u>
Home Address: <u>36 West Rd.</u>	Telephone: <u>East Lebanon</u>
State: <u>Maine</u>	Zip Code: <u>04027</u>
Home of the land, Wind, Soil, or Water: <u>Unimproved personal tributary of the Little River.</u>	
Detailed Description of Site: <u>The parcel is located on the north side of Route 202, 1/4 mile east of the bridge where the Little River flows beneath Route 202. A large old farmhouse (After Vignier Foundation) marks the location.</u>	
Town/City: <u>East Lebanon</u>	Map: <u>R 6</u> Lot: <u>129</u> Contain: <u>1/2</u>
Description of Project: <u>Mr. Roland Public is planning to build a house at the back of his father's property. It will be sitting on an old woods road and will need to cut out one stream crossing for year-round access (using four 3-4' diameter).</u>	

CHECK ONE: This project does ☐ does not ☒ involve work below mean low water.

I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Regulation, Chapter 305. I have a copy of PBR Sections checked below. I have read and will comply with all of the standards.

<input type="checkbox"/> Sec. 2) Sedimentation	<input type="checkbox"/> Sec. 7) Noise	<input type="checkbox"/> Sec. 12) Herb & Pesticides
<input type="checkbox"/> Sec. 3) Water Power	<input checked="" type="checkbox"/> Sec. 8) Wetlands	<input type="checkbox"/> Sec. 14) Public Access
<input type="checkbox"/> Sec. 4) Protection of Wetlands	<input type="checkbox"/> Sec. 9) Stream Channel	<input type="checkbox"/> Sec. 15) Special Land Use Projects
<input type="checkbox"/> Sec. 5) Protection of Forest or Woodlands	<input type="checkbox"/> Sec. 10) State Thruway or Right-of-Way	<input type="checkbox"/> Sec. 16) Freshwater/Fisheries
<input type="checkbox"/> Sec. 6) Cultural Resources	<input type="checkbox"/> Sec. 11) Motor Vehicle Access	<input type="checkbox"/> Sec. 17) Miscellaneous
	<input type="checkbox"/> Sec. 13) Public & Wild Open Land/Trails	

I authorize staff of the Department of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.

I have attached all of the following required materials. NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:

- ☐ Attach a check for \$35 (non-refundable) made payable to: "Treasurer, State of Maine".
- ☐ Attach a U.S.G.S. topographic map or Maine Atlas & Gazetteer map with the project site clearly marked.
- ☐ Attach photographs showing existing site conditions (unless not required under standards).

Signature of Applicant: Roland Public Date: 6/30/94

Keep this notification copy as a record of notice. Send two forms with attachments via certified mail to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

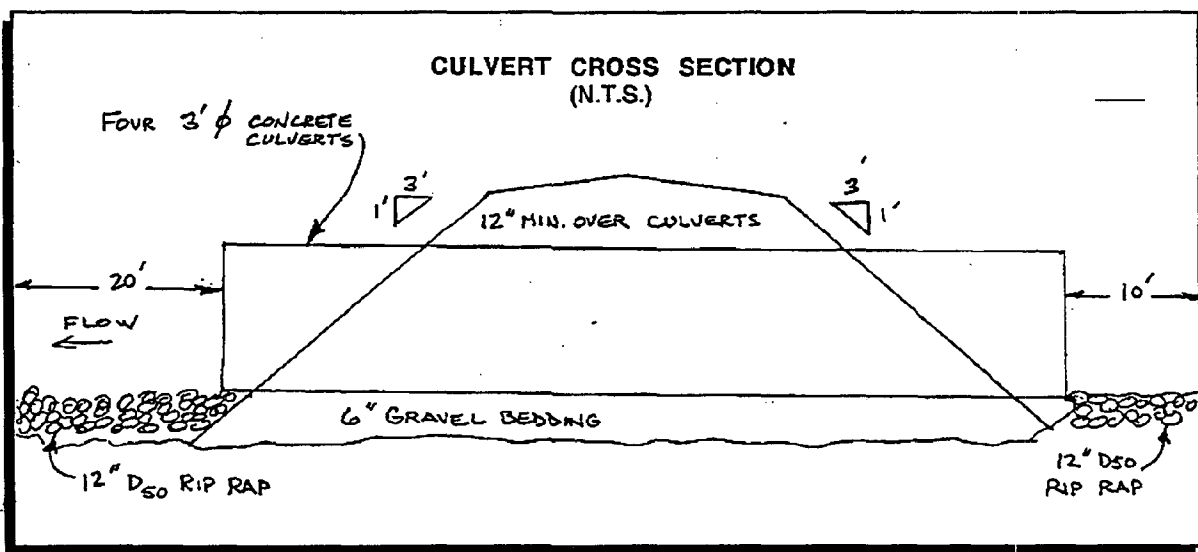
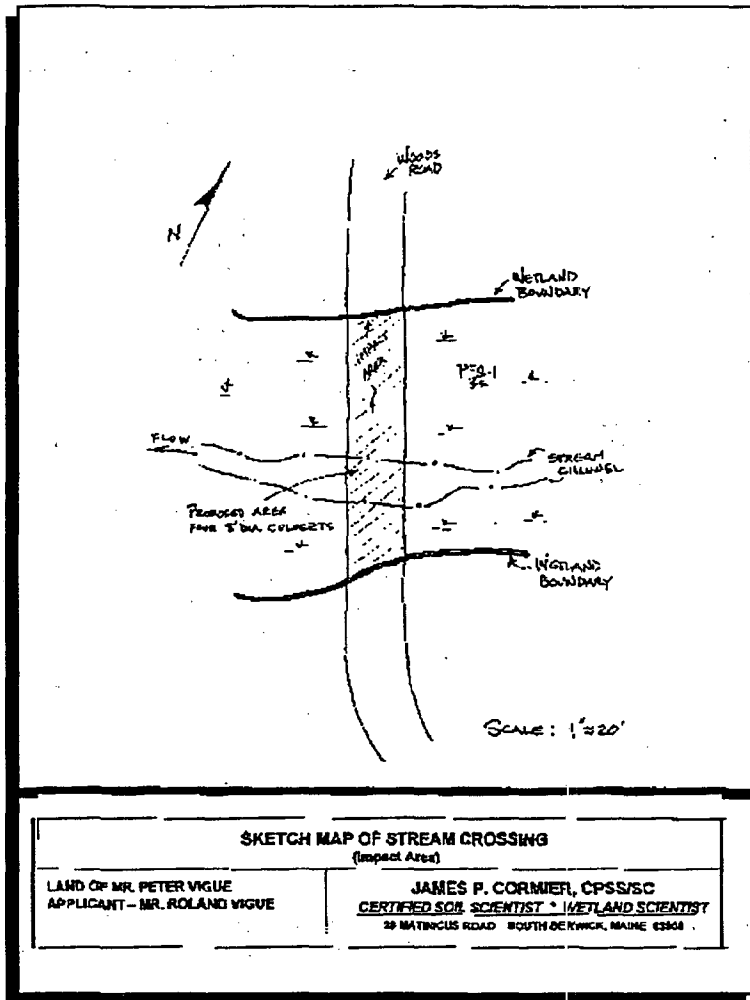
ALBANY DEP STATE HOUSE STATION ALBANY, ME 04401-0017 (207) 281-2111	PORTLAND DEP 512 GANCO ROAD PORTLAND, ME 04103 (207) 852-0300	BANGOR DEP 105 - OGDEN ROAD BANGOR, ME 04401 (207) 841-4570	PRESQUE ISLE DEP 1235 CENTRAL DRIVE PRESQUE ISLE, ME 04769 (207) 784-0477
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OFFICIAL ONLY

PERM	IF	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th

STEP 2: Provide Additional Information

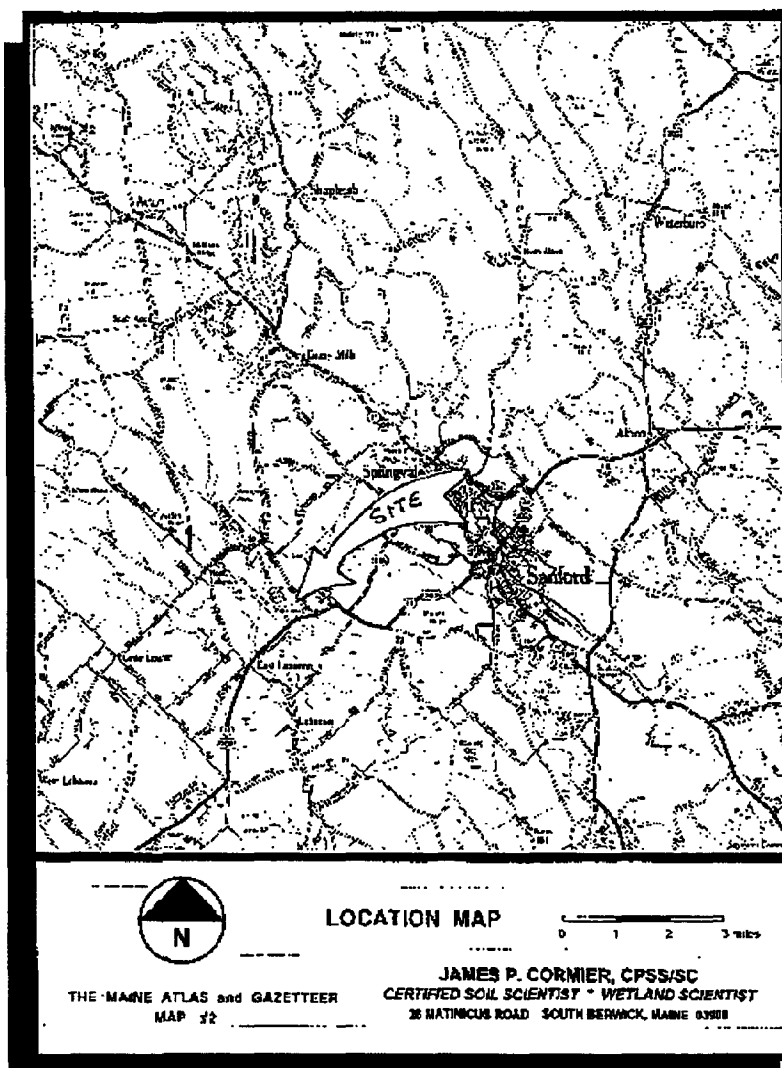
- ☐ In this example the applicant has drawn a plan of his project to explain his proposal.
- ☐ The map shows exactly what area will be impacted by the roadway.
- ☐ The cross-section below shows how the three-foot diameter culverts will be installed under the proposed roadway.



VOLUME II

STEP 3: Submit a Location Map

- ☐ Using a copy of a USGS topographic or a map from the Maine Atlas and Gazetteer (printed by the DeLorme Mapping Company), clearly indicate the exact location of your site. Use an arrow and/or circle to highlight the precise location.
- ☐ The map should be on an 8½" x 11" sheet of paper (the example has been reduced from 8½" x 11" size).



STEP 4: Submit Site Photographs

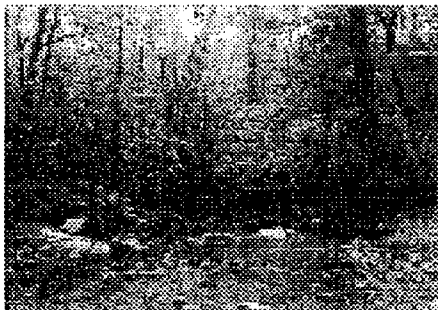
- ☐ Paste color photos of the area you plan to disturb onto one or more 8½" x 11" sheets
- ☐ Indicate on the photo, or in the photo description, where the protected resource is located and what the photo shows. (For more information also see pages 9 and 10.)



A view of the existing logging road which crosses the stream.



A close-up of the stream at the proposed culverted crossing. The tape shown in the center-right portion of the photo measures ten feet across.



A view of the proposed crossing area looking upstream.



A view of the proposed crossing area looking downstream.

Only submit clear color prints; fuzzy, out-of-focus photographs are unacceptable.

INTRODUCTION

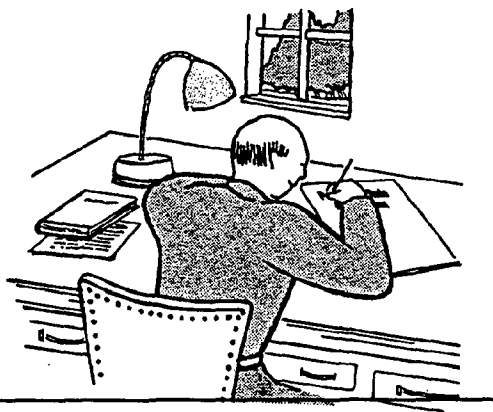
Background - What is "Permit by Rule"?

The Permit by Rule (PBR) procedure is designed to make approval of some projects that are subject to the Natural Resources Protection Act (NRPA) quick and easy. Most projects subject to the Natural Resources Protection Act are approved as **Permit by Rule notifications**.

The idea is simple: if you notify the Department of Environmental Protection (DEP) that you will follow standard practices, you can begin work within 14 days, if they don't contact you. In other words, for certain activities, if you agree in writing that you will abide by DEP's standards, you can avoid the permit application process altogether.

The Purpose of This Guide

Use this guide to help figure out how to take advantage of the Permit by Rule (PBR) procedure. This guide supplements Chapter 305, the NRPA **Permit by Rule "Standards"** and the **Permit by Rule Notification Forms** (Notice of Intent Form) that you should obtain from one of the DEP offices. (See page 26 for the list of offices).



How to Use This Guide

Use this guide to:

- ☐ Determine if the **PBR Procedure** applies to your project. (See pages 2 to 6)
- ☐ Learn about **Notification and Submission Requirements**. (See pages 7 to 10)
- ☐ Learn about **Standards** you must meet to qualify for PBR. (See pages 11 to 19)
- ☐ Read about **Special Situations** and precautions. (See pages 20 and 21)
- ☐ Review a case study of a completed, sample **Notification Form**. (See pages 22 to 25)
- ☐ Learn where to get **More Information** (See page 26)

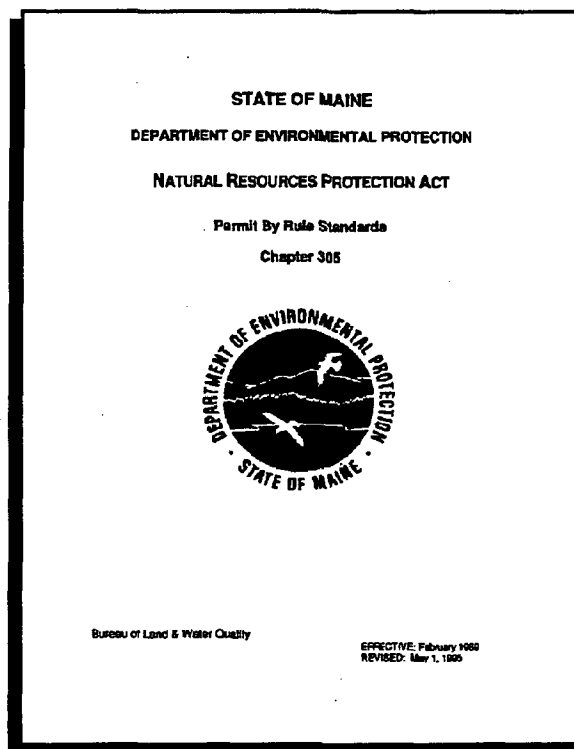
This guide tells you what you can do under the PBR program, provides helpful hints and identifies mistakes to avoid. It also: describes common standards, shows you how to prepare needed exhibits, contains an example of a completed Notification Form, and tells you where you can obtain more information.

VOLUME II

Do not use this guide:

- ☐ as a substitute for the actual law and regulations; or
- ☐ as a final or ultimate authority on what may or may not be acceptable under the actual law and regulation.

This guide can, however, help you understand and take advantage of the **Permit by Rule** process. But, if you have any questions it does not answer, or project issues it does not address or fully cover, contact the DEP.









How to Determine if the PBR Procedure Applies to Your Project

To determine if you are eligible to use the PBR procedure, follow these instructions:

1. Determine if the proposed project site is in or within 100 feet of a **protected natural area** (see the "Protected Natural Resources" box on the next page, or refer to Volume I).
2. Determine if your project involves one (or more) of the seventeen **activities** (see pages 4, 5 and 6).
3. If your proposal meets both these tests, read the applicable standards in Chapter 305 of the **Permit by Rule Standards**.
4. If you believe you can meet all the Standards that apply to your situation, you are ready to **file notice of your intent to abide by the Standards**. (See the example Notification Form on page 22).
5. If you cannot meet the **Permit by Rule Standards**, then you must (a) submit a complete NRPA application (refer to Volume III) or (b) modify your project so it meets the PBR standards.

Protected Natural Resources

If your proposed project is to be located in: one or more of the following areas, or within 100 feet of a river, stream, brook, great pond, freshwater wetland or coastal wetland, you must obtain an NRPA permit or submit a Permit by Rule Notification Form to DEP.

	<i>Protected Resources</i>	<i>Identifying the Resource</i> ¹
	Rivers, streams and brooks	Any drainage channel that has defined banks plus adjacent areas within 100 feet is protected whether water is present year-round or not.
	Great ponds	Natural ponds with a surface area of 10 or more acres, or artificial bodies of water with 30 or more acres of surface area plus adjacent areas within 100 feet.
	Freshwater wetlands	Swamps, marshes and bogs which contain saturated soil areas with a prevalence of wetland vegetation and are not part of a pond.
	Coastal wetlands	All tidal and sub-tidal areas, including all vegetated areas tolerant of saltwater, and all swamps, marshes, bogs or beaches subject to tidal action.
	Coastal sand dune systems	Marine sand beaches, beach berms, frontal dunes, dune ridges, back dunes and sand deposited by wave or wind.
	Fragile Mountain Areas	Mountain areas above 2,700 feet in elevation

¹ For a full description of each resource, see the NRPA Statute.

Activities Allowed Under the Permit by Rule Procedure

If you plan to undertake any one of the following activities you may obtain an NRPA permit by simply filing a PBR Notification Form. Under the PBR regulations, there are seventeen "activities" that the DEP will approve if you meet specific standards. The permitted activities are:

Activity Permitted Under PBR	Commentary
2. Soil Disturbance and/or Filling Adjacent to a Wetland or Water Body	Provided that you leave an undisturbed buffer of 25 ft. and the slope between the normal high water line and the soil disturbance does not exceed 20%.
3. Intake Pipes and Water Monitoring Devices	Pipes that do not affect water level or water flow can be installed under PBR; (Water lines and cables from Great Ponds to single-family houses are exempt provided specific standards are met.) Also applies to drilled wells adjacent to the resource.
4. Replacement of Structures	If the repair involves less than 50% of the structure no permit is required. Replacement may be allowed under the PBR procedure provided similar materials are used and no expansion occurs. (Does not apply to the replacement of dams or to structures in sand dunes.)
5. Movement of Rocks or Vegetation by Hand	No more than a 10-ft. wide clearing, measured along the shoreline, may be created for swimming and/or boating purposes.
6. Outfall Pipes	Pipes, ditches and drain tiles that discharge stormwater qualify under PBR, as do pipe discharges such as sewer outfalls that have been licensed by the Department.
7. Riprap	Riprap (i.e., heavy rocks) can only be used under PBR where there is existing erosion and that erosion cannot be controlled by planting, shrubs and/or trees and ground covers; riprap is not allowed on slopes next to coastal salt marshes or mud flats.

8. Crossings (Utility Lines, Pipes and Cables)	Work on overhead and submerged utility lines and cables qualifies for PBR; ("outstanding river segments" are excluded; see Statute); on great ponds, service to single family homes is exempt provided minimum standards are met.
9. Stream Crossings (Bridges, Culverts and Fords)	A PBR procedure is permitted for new crossings of a river, stream or brook using a culvert or bridge. Crossings of outstanding river segments, rivers subject to shoreland zoning, coastal wetlands and freshwater wetlands are not eligible.
10. General Permits for Maintenance, Repair, and Reconstruction or Replacement of State Transportation Facilities	This applies to Maine Department of Transportation and Maine Turnpike Authority projects only.
11. Restoration of Natural Areas	This does not apply to: removal of dam structures, draining or converting wetlands, dredging, gravel mining or replacing eroded soil.
12. Fisheries and Wildlife Habitat Creation or Enhancement and Water Quality Improvement Projects	This applies only to public natural resource agencies, utilities and municipalities who propose to create habitat and/or improve water quality.
13. Piers, Wharves and Pilings (applies to pile supported piers, wharves and pilings in coastal wetlands, only)	Non-commercial piers are only permitted in that area between high and low tide; ramps and/or floats extending beyond the low tide line must be seasonal.
14. Public Boat Ramps	Applies only to natural resource agencies, municipalities and public utilities, and only in areas where there is no marsh vegetation or tidal flats.
15. General Permit for Selected Activities in Coastal Sand Dune Systems	Activities permitted under PBR are limited to: a) replacement of existing seawalls b) replacement of septic systems in back dune areas; c) dune restoration or construction; d) beach nourishment; e) walkways, driveways and decks in A, B or C flood zones; f) movement of sand or cobble from the front of buried seawalls; and

VOLUME II

	g) new development or additions to existing development in back dune non-flood C zone areas that are not expected to be damaged due to shoreline change.
16. Transfers and Permit Extensions (the transfer of a full permit to a new owner)	Extensions must occur before the permit expires.
17. General Permit for Maintenance Dredging Previously Approved by DEP	Allows the <u>renewal</u> of a full permit provided the dredge material: a) is disposed of on land; b) is in an area that's been dredged within the last 10 years; and c) is not in or within 250 feet of a significant wildlife habitat area.

Please refer to the Permit by Rule Standards, Chapter 305 for more detailed information about permitted activities. This is just an outline.



Example of eroded bank where limited riprap would be appropriate under the Permit by Rule Program.

How to File Notice Under the Permit by Rule Procedure

Once you have obtained a PBR Notification Form and Standards from DEP and have studied them along with this guide, follow these steps in order to file notice:

1. Complete the PBR Notification Form (Notice of Intent Form - see page 22). **Read the Instructions carefully!**
2. Keep the bottom copy and mail (by certified mail, return receipt requested), the other two copies, along with any required enclosures, to your local DEP office. (For addresses see "For More Information" on page 26.) Ensure that you enclose a map (see pages 8 and 24), a check for \$35 (made payable to Treasurer, State of Maine) and a photograph of the site (see pages 9 and 10).
3. Wait 14 days (from the date the Department receives the PBR forms).
4. Begin work if no one from DEP contacts you before the end of the waiting period; your completed Notification Form becomes your permit. The permit is good for one year.

Note: (a) if you have any questions contact the nearest DEP office, and
(b) make sure you are not subject to any other local, state and/or federal requirements such as the Shoreland Zoning Act, the Submerged Lands Act, or the Clean Water Act (see below).

Other Laws that May Apply

Filing a Notification Form under the NRPA Permit by Rule procedure (or completing a full NRPA application) **does not mean** that your project complies with other laws that may apply. Determine if any one of the following apply in your situation:

LAW	EXPLANATION
Shoreland Zoning	Applies to most projects located within 250 ft. of a water body. Contact the local planning board or, in the unorganized towns, the Land Use Regulation Commission (287-2631 or 1-800-452-8711 in Maine).
Submerged Lands Act	Applies to projects below the mean low water line of a water body. Contact the Maine Department of Conservation (287-3061).
River & Harbor Act	Applies to any work conducted in "navigable waters". Contact the U.S. Army Corps of Engineers (623-8124 or 623-8367).
Clean Water Act	Applies if material (e.g., fill) is placed in water bodies or any wetland. Contact the U.S. Army Corps of Engineers (623-8124 or 623-8367); however, if a freshwater wetland is involved, contact DEP.

2. PBR SUBMISSION REQUIREMENTS

All PBR Notifications require that you submit (A) a **site location map** and (B) **photographs**. This section tells you how to prepare the correct information to attach to your PBR Notification Form.

A. How to Prepare a Site Location Map

You are required to submit a **USGS topographical map** or a **Maine Atlas and Gazetteer (TM)** map showing the location of your project site. Topo maps can be obtained from the Maine Geological Survey in Augusta, (see page 26) some sporting goods stores and bookstores. The Maine Atlas and Gazetteer is available in most bookstores or from DeLorme Mapping Company, Freeport, Maine. Make an 8½" x 11" photocopy of the area of your site and clearly mark your project site on the map. The example below illustrates what DEP finds acceptable.

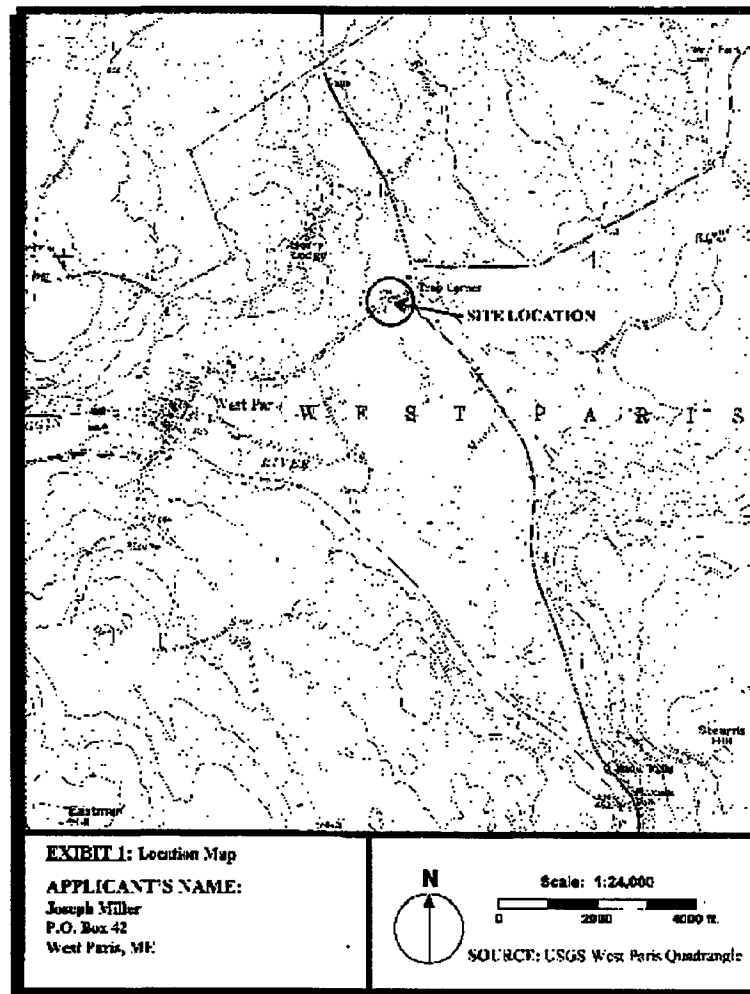
Site Location Map

When preparing your site location map, make sure that:

- ☐ the map is clear and legible;
- ☐ the exact site location is clearly marked with an easy-to-read arrow and/or circle; and
- ☐ your name is written on the map.

For another example of a site location map see page 24.

Note: This is a reduction; the map you submit must be 8½" x 11".



How to Prepare Photographs of Existing Site Conditions

You must submit "**before**" photographs showing the relation of the project site to the resource (i.e., pond, stream, wetland, etc.)

The illustrations below show the kind of photographic evidence DEP needs to evaluate your Notification. Please:

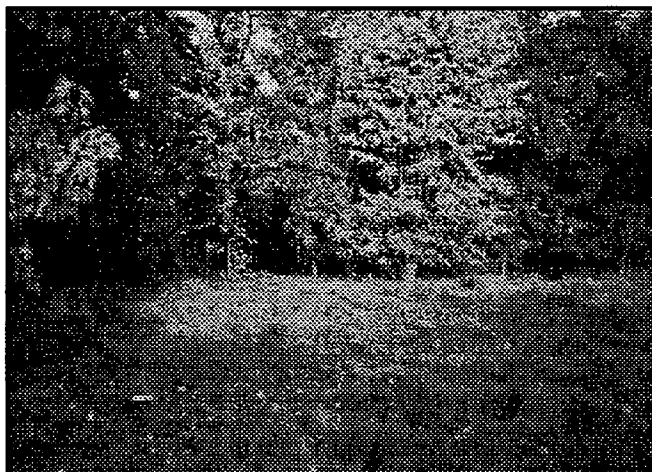
- ☐ submit clear, color, photo prints or color photocopies;
- ☐ include photos taken from different angles on the site;

- ☐ shoot the exact area that you plan to be working in;
- ☐ date the photos and state who took them;
- ☐ state what the photo shows, where the work is planned and the distance objects in or near the project site are from the protected resource (e.g., "looking north, upstream, birch tree is 6 feet from stream" or "a view of the six foot diameter culvert, 20 feet from the proposed site" ...)

Examples of "Before" Photographs:

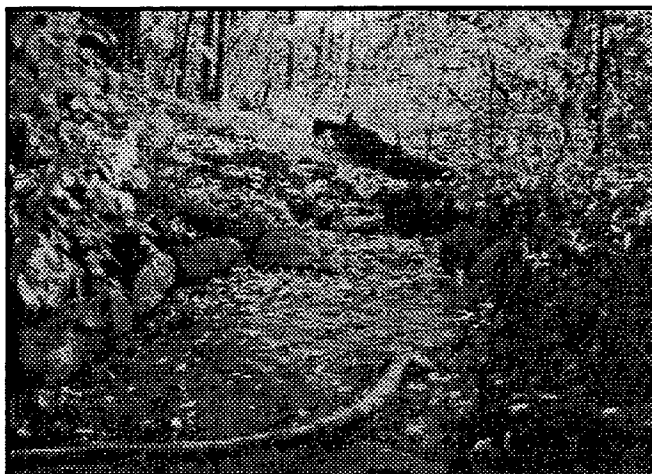
View of project site looking due north.
Stream is 20 feet north of the large maple.

Photographer: Jane Dorfan
Date of photo: 11/3/94
Property owner: Charles Shute



View of stream bed during dry season,
looking east.

Photographer: Jane Dorfan
Date of photo: 11/3/94
Property owner: Charles Shute



View of existing culvert inlet, 33 feet north-west of large maple.

Photographer: Jane Dorfan

Date of photo: 11/3/94

Property owner: Charles Shute



Save Time: Make Sure Your Submission is Complete

Your PBR Application will be returned to you if you don't:

- ☐ submit a copy of a USGS topographic map or DeLorme Atlas map with your site clearly marked;
- ☐ submit good "before" photos of the site;
- ☐ include a check or money order for \$35.00 made payable to the Treasurer, State of Maine;
- ☐ provide a thorough and complete description of the project; and
- ☐ qualify for the PBR procedure and meet all standards for the activity.

STANDARD TECHNIQUES TO CONTROL EROSION

When filing a PBR Notification you must state that you will comply with the applicable standards in Chapter 305 and, in most cases, these standards include erosion control requirements. The illustrations and notes below show acceptable methods of controlling erosion to protect water quality. They describe:

- A. How to Install a Silt Fence or Hay Bale Barrier.

- B. How to Rip-Rap Steep Slopes and Banks.
C. How to Apply and Anchor Mulch, Install Sod, Turf or Erosion Control Blankets and Revegetate Disturbed Areas.

For more information consult the Cumberland County Soil and Water Conservation District (CCSWCD) manual on the Best Management Practices (BMP's) for Construction and Erosion Control. See page 26 for more information.

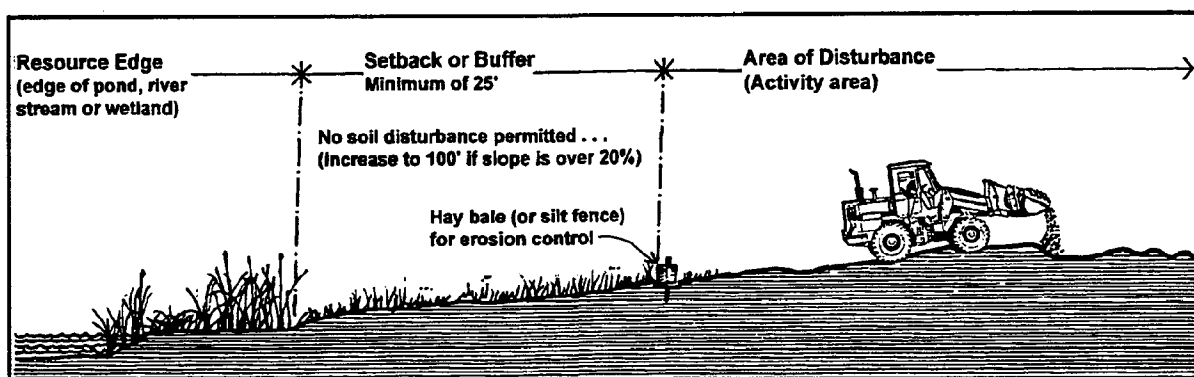
How to Install a Silt Fence or Hay Bale Barrier

For most activities the PBR standards state: "Prior to the start of an activity, erosion control measures shall be installed . . ." An effective way to prevent soil from washing into adjacent streams, ponds or wetlands, while the ground is exposed, is to use a silt fence or staked hay bales. When installing these erosion barriers:

- ☐ place the fence or barrier at least 25 feet from the edge of the resource (and 100 feet if the slopes involved are over 20%);
- ☐ follow the directions in the illustrations that follow to ensure a good installation;

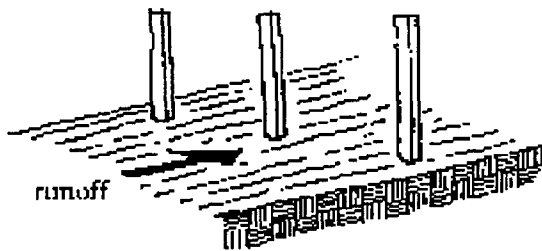
- ☐ ensure the silt fence or hay bales are set into the ground; and
- ☐ inspect your barriers after a rain storm; no muddy water should leave the site.

After construction replant the area and mulch or, if it's late in the season, mulch the area with straw or hay and seed in the spring, after removing the mulch. Only remove the erosion control barrier after the area is stabilized and revegetated.

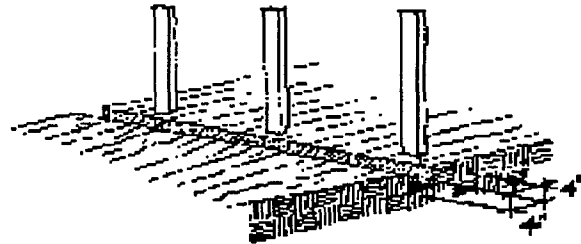


VOLUME II

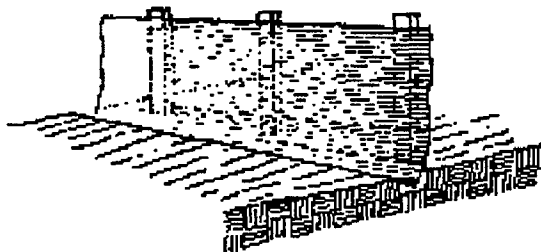
HOW TO CONSTRUCT A SILT FENCE



1. Set the stakes at least 8" into the ground.

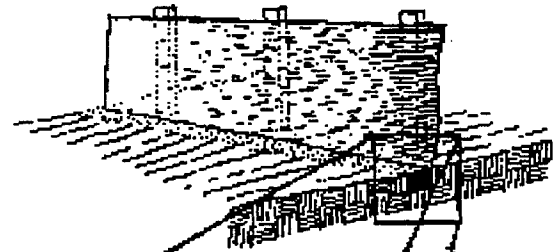


2. Excavate a 4" x 4" trench upslope along a line of stakes.

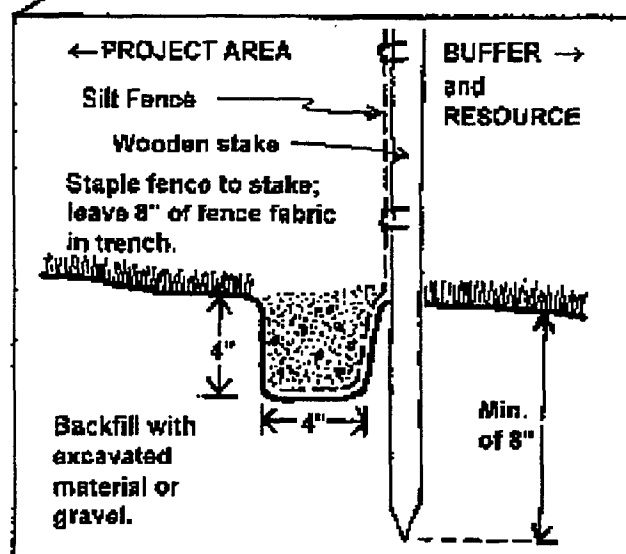


3. Staple filter material * to stakes and extend it into the trench.

* Silt fence filter material is available from some garden centers and contractor equipment supply stores.

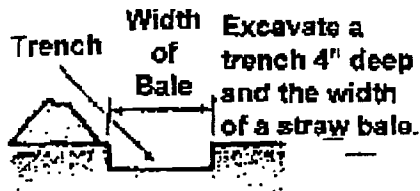


4. Backfill and compact the excavated soil.

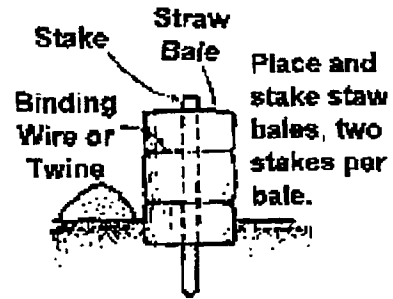


HOW TO CONSTRUCT A HAY BALE BARRIER

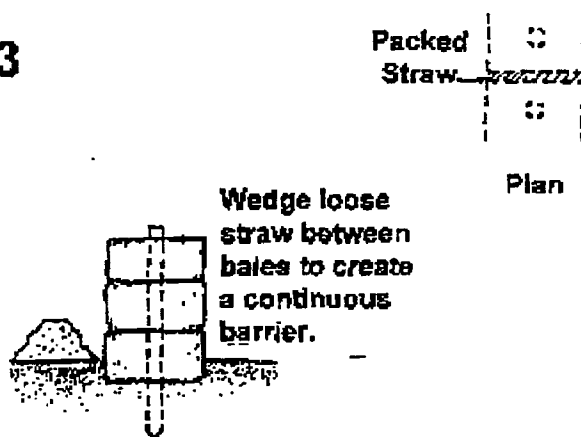
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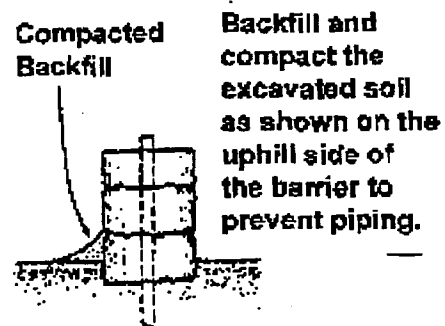
2



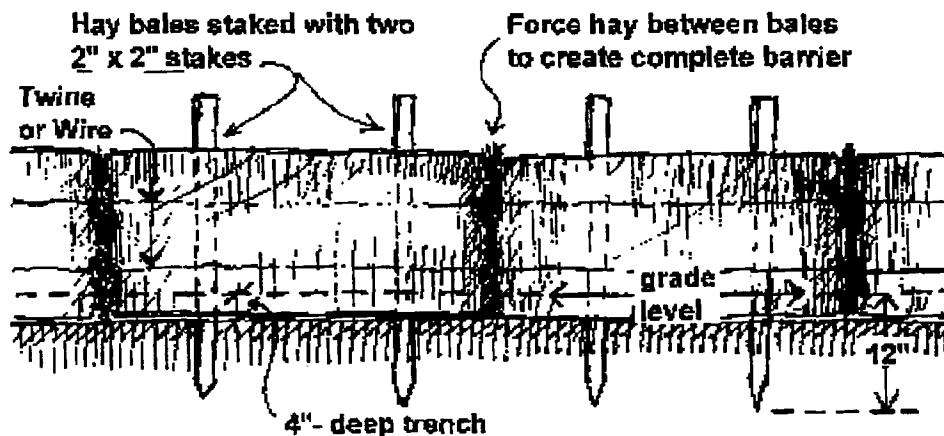
3



4



CONSTRUCTION OF A HAY BALE BARRIER (USDA Soil Conservation Service)



FRONT VIEW OF PROPERLY INSTALLED HAY BALES

Note: If there is a danger of either the silt fence or hay bale barrier failing, install both as a double barrier.

How to Riprap Steep Slopes and Banks

What is Riprap?

Large angular shaped rocks carefully placed over a layer of gravel or filter blanket to cover a shoreland slope to combat erosion are referred to as "riprap". Riprap should **only** be used on slopes and banks that **cannot** be stabilized with vegetation. This section describes ways to install riprap to meet PBR standards.

How to Install Riprap

The diagrams below show three ways to install riprap. You must meet these requirements:

- ☐ install riprap only where erosion **already** exists;
- ☐ rocks for riprap must be obtained from up-land sites, **not** from in the water or shore;
- ☐ don't extend the riprap further into the water than the existing toe of the slope;
- ☐ if your project is on a river, stream, or brook, show evidence of project design approval from a Professional Engineer or the local Soil and Water Conservation District;
- ☐ revegetate with trees and shrubs, down to the high water line; and

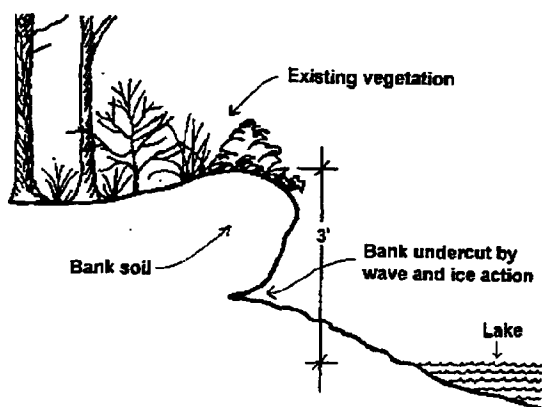
- ☐ reestablish damaged wetland vegetation.

Installation is done in three steps:

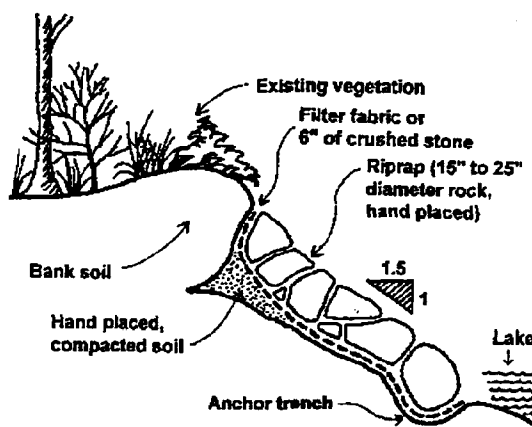
1. Prepare the subgrade; create a slope of no less than 2 horizontal to 1 vertical and no more than 1.5 horizontal to 1 vertical. Compact any fill used.
- 2.* Place a filter blanket of six inches of gravel (crushed rock) or Geotextile or both. The gravel layer should be uniform; the filter fabric (Geotextile) must be anchored down.
3. Place the stones (up to ± 25 " diameter) to create a well-graded mass.

** This step is critical! Soil behind the rocks will wash out without it.*

HOW TO RESTORE A LOW ERODED BANK WITH RIPRAP

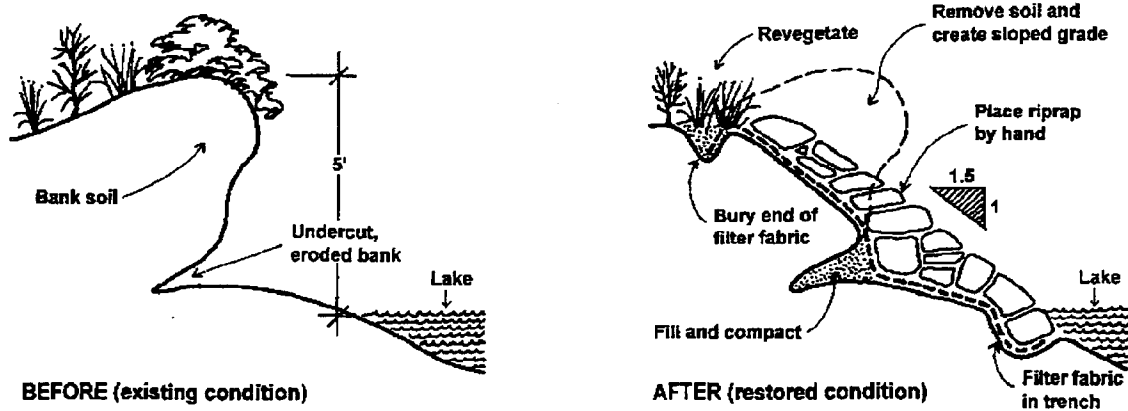


BEFORE (existing condition)

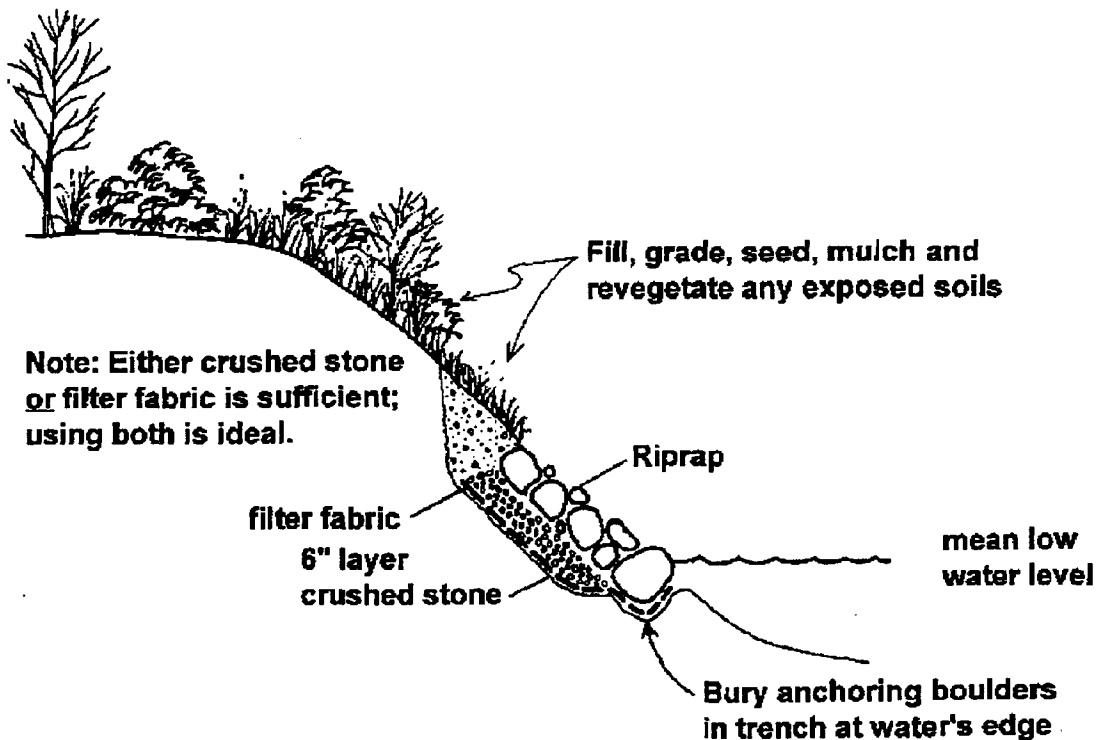


AFTER (restored condition)

HOW TO RESTORE A HIGH ERODED BANK WITH RIPRAP



SLOPING BANK RIPRAP



How to Apply and Anchor Mulch, Use Sod, Turf or Erosion-Control Blankets, and Revegetate Disturbed Areas

Wherever natural vegetative cover is removed or disturbed, it must be restored as soon as possible. Use temporary or permanent measures such as mulch, mats, sodding, revegetation and/or seed-

ing. The standards below provide an overview of approved methods to control erosion under the PBR procedure; check the CCSWCD Manual for more detail. (See page 26.)

Hay or Straw Mulch Application

When laying down mulch:

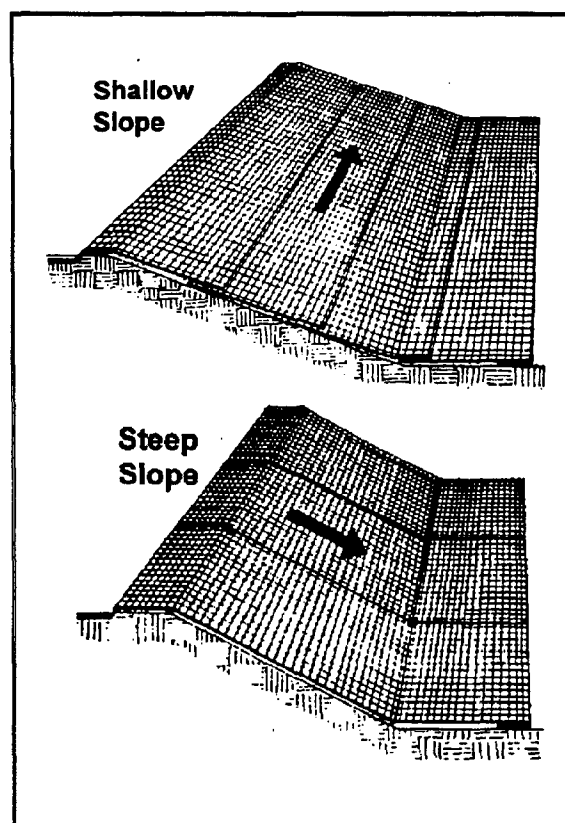
- ☐ apply at a rate of 1 (one) bale per 500 sq. ft.; spread the material evenly over the whole area; wet down to anchor.
- ☐ in windy areas, in the fall, winter or spring, or on slopes of over 5%, anchor the mulch with netting, peg and twine or other method so it doesn't wash away (see Anchoring, below);
- ☐ always mulch before any storm or downpour occurs; inspect the situation afterwards to make sure the mulch is effective; and
- ☐ maintain the mulch surface until the area is revegetated.

Anchoring Hay or Straw Mulch

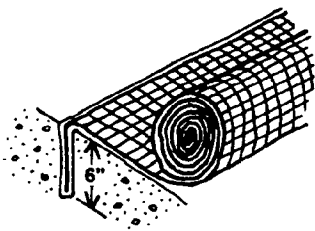
When anchoring mulch:

- ☐ on shallow slopes, lay strips of anchoring net **across** the slope; on steep (+20%) slopes lay the strips **down** the slope;
- ☐ anchor the upland edge of the net in a 6 inch deep trench; and
- ☐ overlap net and mat edges 4" and staple the center every 3 ft. (see illustrations on the next page)

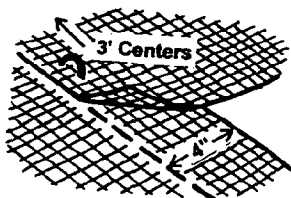
Note: An acceptable alternative to hay and straw mulch is hydro-mulching or seeding; this is a commercial application of grass seed, fertilizer and a specially formulated mulch that is sprayed onto the disturbed soil. It should only be used when there is sufficient growing season for the seed to germinate and take root and should not be used after September 30.



Installation of Mulch Netting

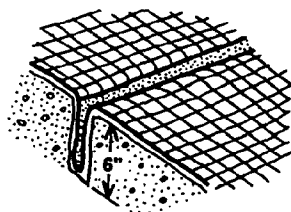
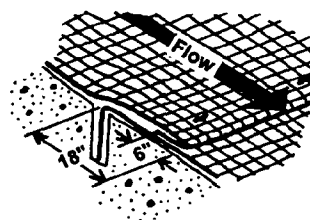


Anchor Slot: Bury the up-channel end of the net in a 6" deep trench. Tamp the soil firmly. Staple at 12" intervals across the net.



Joining Strips: Insert the new roll of net in a trench, as with the Anchor Slot. Overlap the up-channel end of the previous roll 18" and turn the end under 6". Staple the end of the previous roll just below the anchor slot and at the end of 12" intervals.

Overlap: Overlap edges of the strips at least 4". Staple every 3 feet down the center of the strip.



Check Slots: On erodible soils or steep slopes, check slots should be made every 15 feet. Insert a fold of the net into a 6" trench and tamp firmly. Staple at 12" intervals across the net. Lay the net smoothly on the surface of the soil - do not stretch the net, and do not allow wrinkles.

Erosion Control Blankets

Various types of erosion control "blankets" or erosion matting are available commercially. Made of natural fiber and a mat of organic material that serves as a fertile bed for plant growth, these blankets can be used in place of natural grass sod. The photograph shows a typical blanket type installation (in foreground) in a roadside ditch. Note rock riprap is used on the steep sloping ditch beyond the hay bale.



Sodding

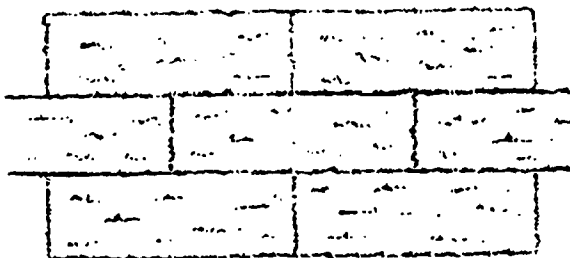
Covering erodible soils with grass sod or turf is an effective erosion control measure, if done correctly. It is best used in drainage channels or on lawns but not on steep slopes. Further:

- ☐ use sod only on slopes of 2:1 or flatter;
- ☐ use freshly lifted sod;
- ☐ lay sod strips at right angles to the water flow and stagger joints (see diagram);

- ☐ use staples or mesh wire or wooden pins to hold sod on steeper slopes; and
- ☐ irrigate the sodded area immediately after laying it.



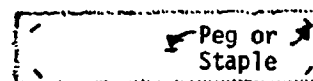
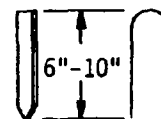
Butting-angled ends caused by the automatic sod cutter must be matched correctly.



Lay sod in a staggered pattern. Butt the strips tightly against each other. Do not leave spaces and do not overlap. A sharpened mason's trowel is a handy tool for tucking down the ends and trimming pieces.



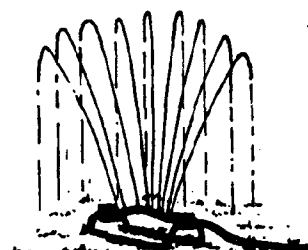
Lay sod across the direction of flow.



Use pegs or staples to fasten sod firmly - at the ends of strips and in the center, or every 3-4 feet if the strips are long. When ready to mow, drive pegs or staples flush with the ground.



ROLL sod immediately to achieve firm contact with the soil.



WATER to a depth of 4" as needed. Water well as soon as the sod is laid.



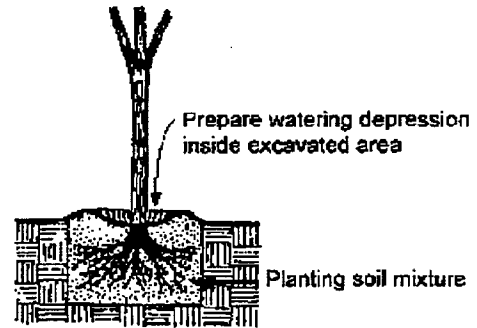
MOW when the sod is established - in 2-3 weeks. Set the mower high (2"-3").

Revegetation and/or Seeding

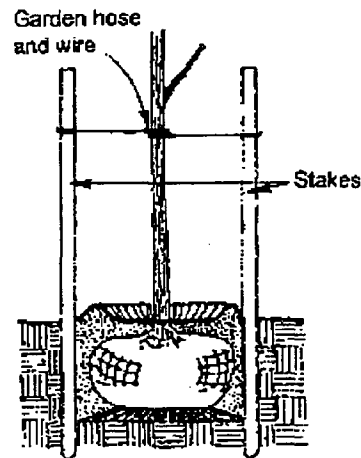
Under the PBR procedure you must permanently revegetate or seed disturbed areas as soon as your project is complete. In areas where sod is inappropriate (i.e., areas that are steep or rocky, in shaded areas and along streambanks) stabilizing the soil with vegetative cover, such as trees, shrubs, vines and ground cover, is best because they control erosion, provide habitat and buffer water bodies from phosphorus.

When revegetating remember to:

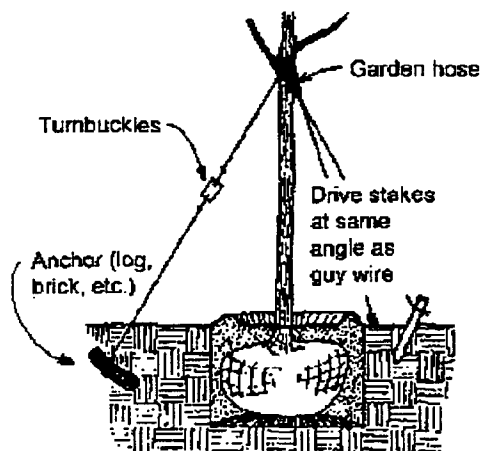
- ☐ select trees or shrubs that are hardy and meet the size, growth, shading and wild-life benefits you desire;
- ☐ stake and support newly planted trees;
- ☐ water and fertilize trees in the early spring;
- ☐ mulch or seed soil between trees and shrubs;
- ☐ make sure no soil is left exposed;
- ☐ monitor the revegetated area and check growth periodically; and
- ☐ lime and fertilize, based on soil tests, for ground covers, vines and seeding; or use:
 - ground limestone: 130 lbs/1,000 sq. ft. or
 - fertilizer (10-10-10 or equivalent): 14 lbs/1,000 sq. ft.



Plant at same depth as where previously grown (slight higher in poorly drained soils). Spread out roots of bare-root specimens.



TREES UNDER 20'



TREES OVER 20'

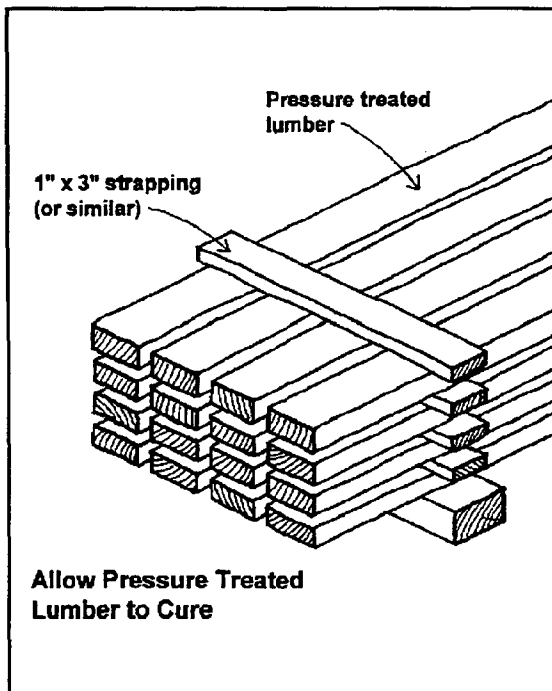
SPECIAL SITUATIONS

Working with Pressure-Treated Lumber and Concrete

If your project involves the placement of pressure-treated wood or concrete in wetlands, streams, lakes or rivers, follow these directions:

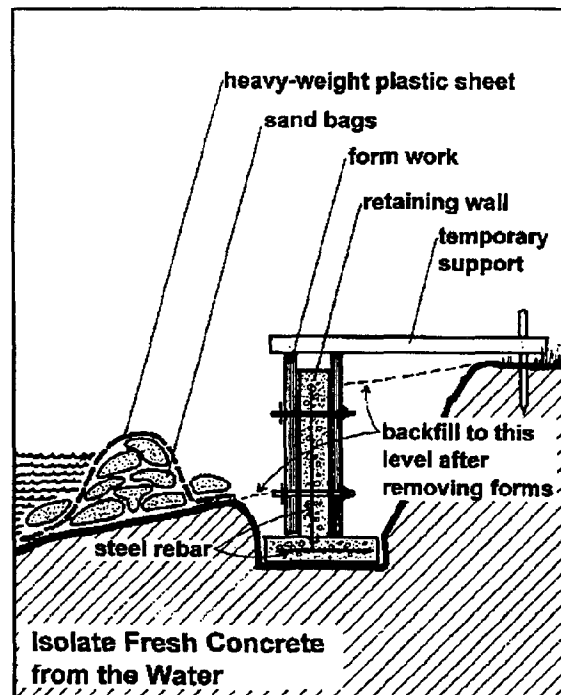
1. Cure Pressure-treated Lumber before Using

A fresh batch of pressure-treated wood can contain toxic chemicals that have not been absorbed by the wood. To prevent these chemicals from being washed off into nearby water, cure or air dry the lumber as soon as it is delivered on-site. This is done by restacking and placing strapping between each layer of wood, so air can move freely around it. Only use the wood when it is dry and no wet spots are evident.



2. Keep Fresh Concrete and Concrete Formwork Away from the Water

No fresh concrete should come in contact with surface or ground waters. The concrete will contaminate the waters. Use only pre-cast concrete that is well cured, or isolate new concrete work with forms or a coffer dam while it cures in-place for at least 7 days. On small jobs in shallow water the coffer dam can be made from sand bags and sheets of plastic.



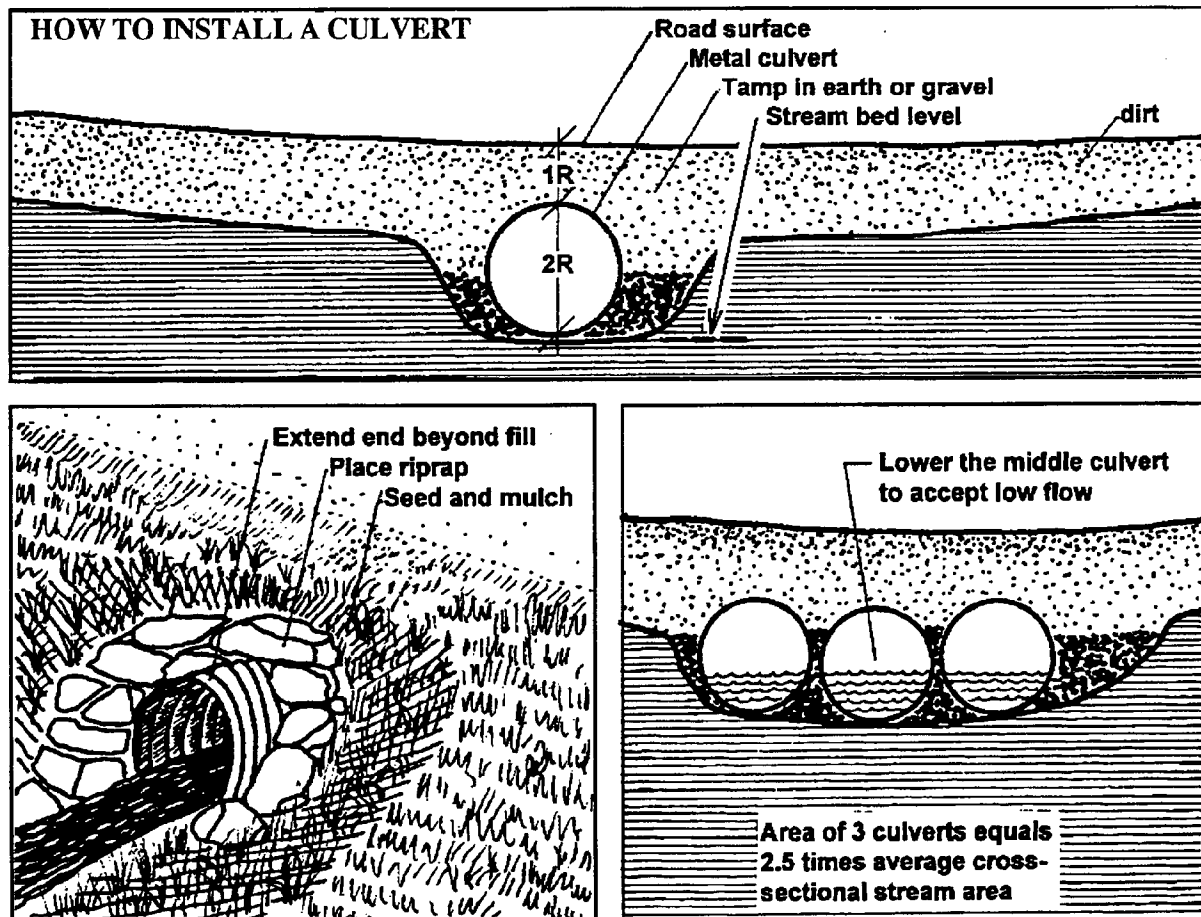
Installing Culverts

When installing a culvert follow these guidelines:

1. Place the road to cross the stream channel at right angles; select a location with firm banks and level approaches.
2. Select a culvert (or culverts) that is large enough to handle runoff from a 10 year frequency storm.* The culvert must not be over 75 ft. long.
3. Install the culvert(s) so that:
 - ☐ the bottom is at or just below streambed level (to allow fish passage);
 - ☐ earth or gravel is tamped around at least half the culvert for its full length;

- ☐ the dirt over the top is at least as deep as half the culvert diameter;
- ☐ the ends extend beyond the fill and are riprapped;
- ☐ the overall slope of the culvert does not exceed 1%; and
- ☐ if more than one culvert is used, one is lower to carry low flows.

* *The Maine Soil and Water Conservation District offices (see page 26) can help you figure this out. As a general rule the culvert cross sectional area must be equal or greater than 2.5 times the stream cross-section.*



CASE STUDY

A Sample Permit by Rule Notification Document

Use this example of a completed PBR Notification document as a model for your project submission. You must mail the Notification Form, your application fee, a location map and photographs of the existing site to the DEP for your submission to be considered complete. Provide additional information if possible.

STEP 1: Fill out the PBR Notification Form

- ☐ Obtain this form from one of DEP's offices (see page 28 for addresses and phone numbers).
- ☐ Fill in your name, address, phone, etc.
- ☐ Provide exact instructions on how to find your site.
- ☐ Describe what you plan to do precisely; use additional paper if necessary to describe or illustrate the project. (See over for example.)
- ☐ Refer to Chapter 305 from DEP and determine which topic (section) applies to you; then read the entire section so you know what standards apply to you.
- ☐ Mail this form along with the attachments, via certified mail, to the nearest DEP office listed.

Note: This example form has been reduced in size.

5/22 DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)
PERMIT BY RULE NOTIFICATION FORM
(For use with DEP Regulation, Chapter 305)

PLEASE TYPE OR PRINT IN BLOCK LETTERS ONLY (2 COPIES, PLEASE REAR DOWN)

NAME of Applicant: <u>Mr. Roland Public</u>	Natural Owner: <u>Mr. John Public</u>
Address: <u>36 West Rd.</u>	Town/City: <u>East Lebanon</u>
State: <u>Maine</u> Zip: <u>04027</u>	County: <u>York</u>
Name of Stream, Pond, Lake or Subject: <u>Unnamed personal tributary of the Little River</u>	
Detailed Description of Site: <u>The parcel is located on the north side of Route 202, just east of the bridge where the Little River flows beneath Route 202. A large old barn (Peter Ligon residence) marks the location.</u>	
Town/City: <u>East Lebanon</u>	Map #: <u>R 6</u> Lot #: <u>129</u> County: <u>York</u>
Description of Project: <u>Mr. Roland Public is planning to build a house at the back of his father's property. It will be siting on an old woods road and will need to build a stream crossing for year-round access (using four 3-ft. culverts).</u>	

CHECK ONE: This project: ☐ does ☒ does not involve work below mean low water.

I am filing notice of my intent to carry out work which meets the requirements for Permit by Rule (PBR) under DEP Regulation, Chapter 305. I have a copy of PBR Sections checked below. I have read and will comply with all of the standards.

<input type="checkbox"/> Sec. 305(1) Discharge	<input type="checkbox"/> Sec. 305(7) Piling	<input type="checkbox"/> Sec. 305(12) Ties & Piling
<input type="checkbox"/> Sec. 305(2) Piling	<input checked="" type="checkbox"/> Sec. 305(8) (b) (1) Culverts	<input type="checkbox"/> Sec. 305(14) Muds, Sand, Ropes
<input type="checkbox"/> Sec. 305(6) Replacement of Structures	<input type="checkbox"/> Sec. 305(9) Storage of Materials	<input type="checkbox"/> Sec. 305(15) Small Earth Dist. Projects
<input type="checkbox"/> Sec. 305(8) Removal of Pile or Structure	<input type="checkbox"/> Sec. 305(10) State Transfer of Oil Facilities	<input type="checkbox"/> Sec. 305(16) Transport/Transfer Corrosion
<input type="checkbox"/> Sec. 305(10) Earth Piling	<input type="checkbox"/> Sec. 305(11) Protection of Natural Areas	<input type="checkbox"/> Sec. 305(17) No Resource Landfill
<input type="checkbox"/> Sec. 305(12) Piling	<input type="checkbox"/> Sec. 305(13) Ties & Piling	

I authorize staff of the Department of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.

I have attached all of the following required materials. NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:

- ☐ Attach a check for \$35 (non-refundable) made payable to: "Treasurer, State of Maine".
- ☐ Attach a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
- ☐ Attach photographs showing existing site conditions (unless not required under standards).

Signature of Applicant: Roland Public Date: 6/20/94

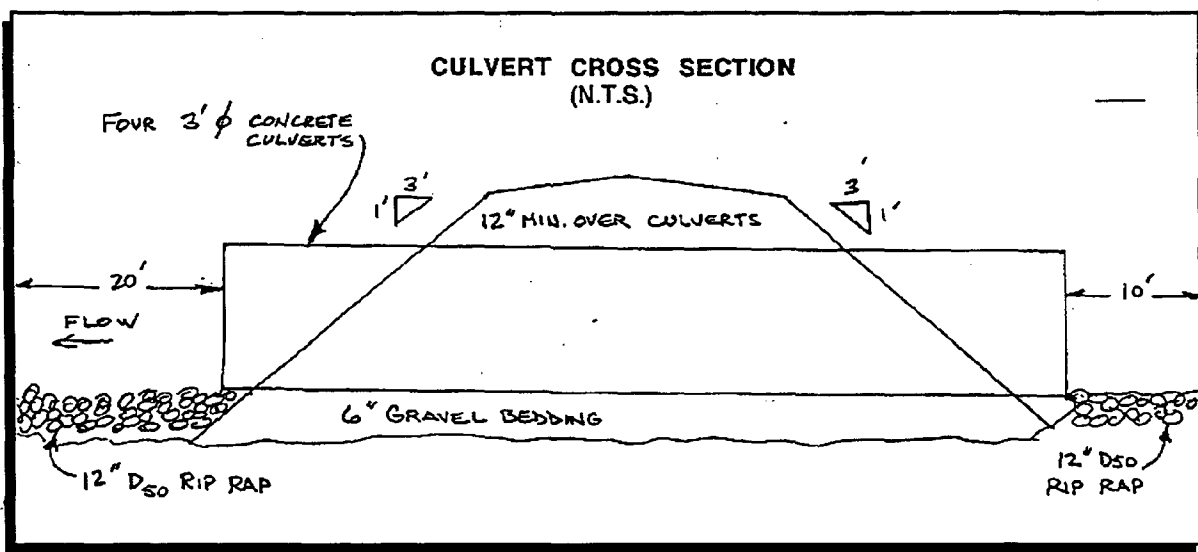
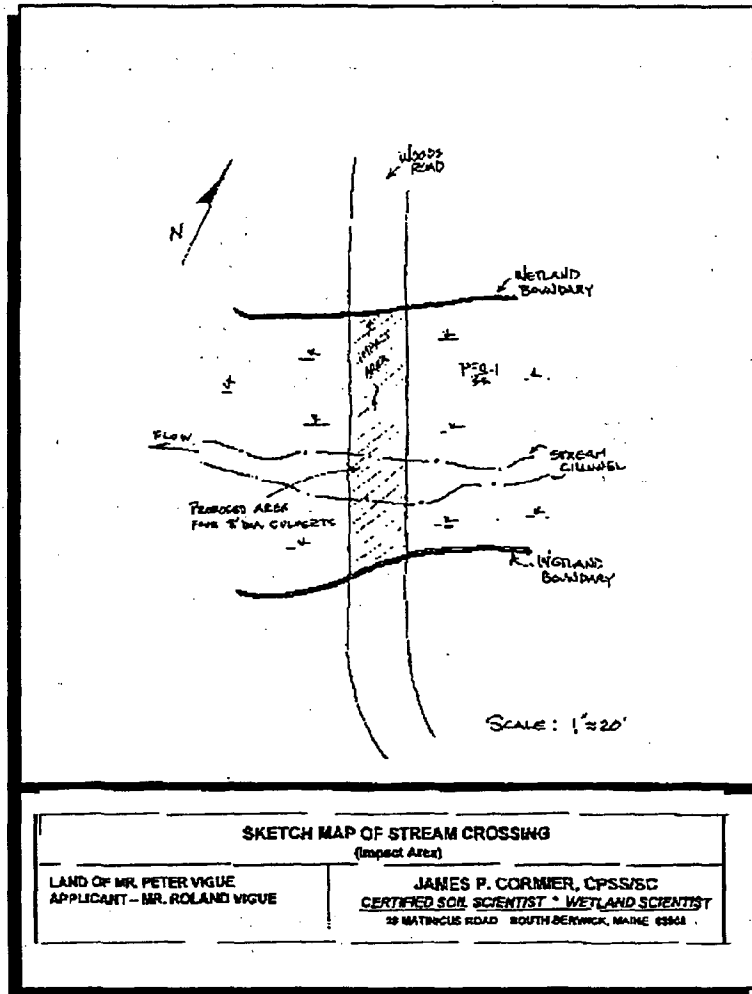
Keep this bottom copy as a record of notice. Send the form with attachments via certified mail to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

ALBANY DEP STATE HOUSE STATION 17 ALBANY, ME 04401-0017 (207) 281-2111	PORTLAND DEP 312 CANCO ROAD PORTLAND, ME 04103 (207) 853-6200	BANGOR DEP 101 OGDEN ROAD BANGOR, ME 04401 (207) 344-4270	PRESQUE ISLE DEP 1235 CENTRAL DRIVE PRESQUE ISLE, ME 04769 (207) 764-0477
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COPIES OF THIS FORM	DATE	TIME	BY
1	6/20/94	10:00	ALB

STEP 2: Provide Additional Information

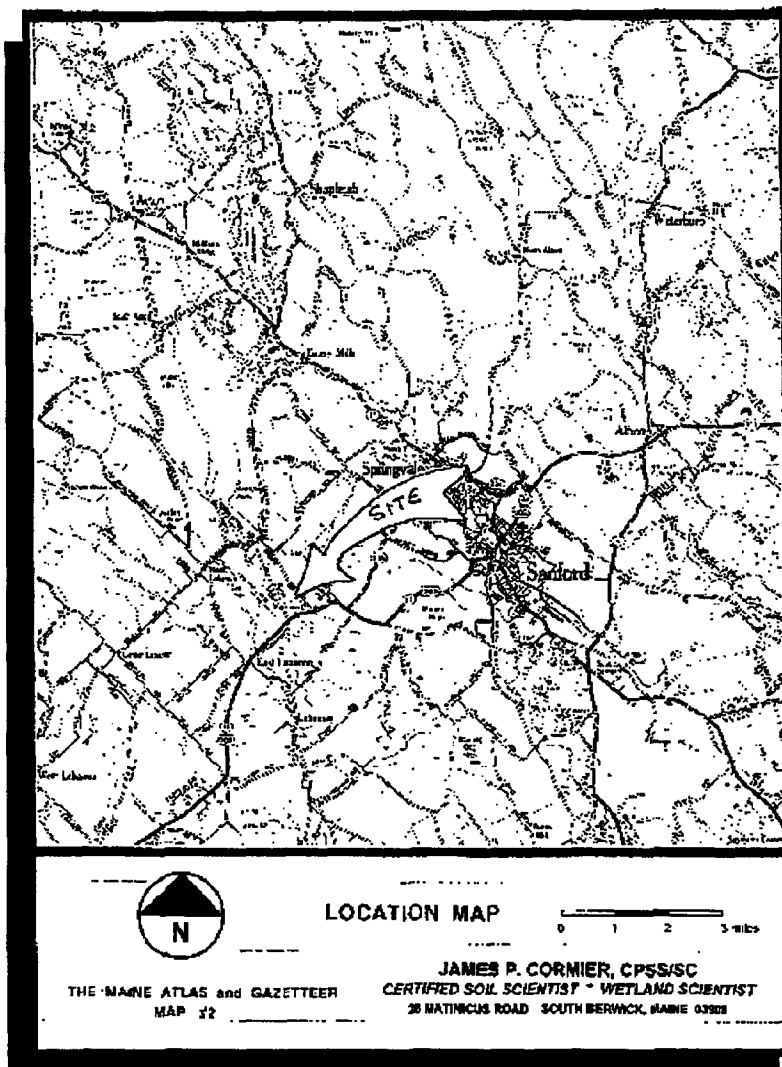
- ☐ In this example the applicant has drawn a plan of his project to explain his proposal.
- ☐ The map shows exactly what area will be impacted by the roadway.
- ☐ The cross-section below shows how the three-foot diameter culverts will be installed under the proposed roadway.



VOLUME II

STEP 3: Submit a Location Map

- ☐ Using a copy of a USGS topographic or a map from the Maine Atlas and Gazetteer (printed by the DeLorme Mapping Company), clearly indicate the exact location of your site. Use an arrow and/or circle to highlight the precise location.
- ☐ The map should be on an 8½" x 11" sheet of paper (the example has been reduced from 8½" x 11" size).

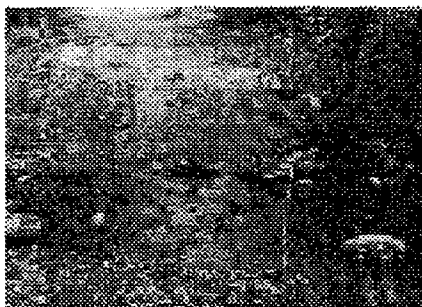


STEP 4: Submit Site Photographs

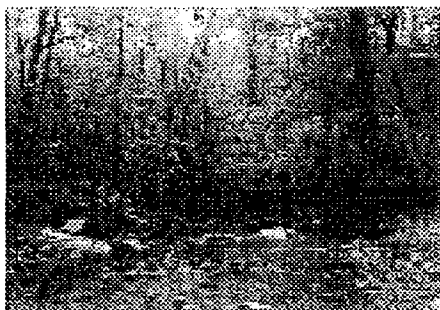
- ☐ Paste color photos of the area you plan to disturb onto one or more 8½" x 11" sheets
- ☐ Indicate on the photo, or in the photo description, where the protected resource is located and what the photo shows. (For more information also see pages 9 and 10.)



A view of the existing logging road which crosses the stream.



A close-up of the stream at the proposed culverted crossing. The tape shown in the center-right portion of the photo measures ten feet across.



A view of the proposed crossing area looking upstream.



A view of the proposed crossing area looking downstream.

Only submit clear color prints; fuzzy, out-of-focus photographs are unacceptable.

FOR MORE INFORMATION

Much of the information you may need to comply with the Natural Resources Protection Act is described below, along with a reference to an information source. Addresses and telephone numbers for state and federal information sources cited appear following the topic references.

Topic and Type of Information	Source
The Natural Resources Protection Act <ul style="list-style-type: none">- Statute- Regulations- Educational Publications- Other natural resources protection laws	Maine Department of Environmental Protection <ul style="list-style-type: none">- Bureau of Land & Water Quality- Division of Land Resource Regulation Town and city offices; planning directors; code enforcement officers
Forest Management Practices	Maine Department of Conservation <ul style="list-style-type: none">- Maine Forest Service- Land Use Regulation Commission
Maps <ul style="list-style-type: none">- Topographical- Wetlands and sand dunes- National Wetlands Inventory- Aerial photographs	Maine Department of Conservation <ul style="list-style-type: none">- Maine Geological Survey (topographical, wetlands and sand dunes, National Wetlands Inventory) U. S. Geological Survey (topographical) U. S. Department of Agriculture <ul style="list-style-type: none">- Natural Resources Conservation Service (aerial photographs) Some city and town offices may also have maps on file
Natural Areas of Significance	Maine Department of Conservation <ul style="list-style-type: none">- Maine Natural Areas Program
Plumbing Code and Septic Tank Installation	Maine Department of Human Services <ul style="list-style-type: none">- Division of Health Engineering Local plumbing inspector
Sea Run Salmon Spawning and Nursery Areas	Atlantic Sea Run Salmon Commission

FOR MORE INFORMATION

Shoreland Zoning

- Regulations
- Maps

Maine Department of Environmental Protection
- Shoreland Zoning Unit

City or Town Offices

Solid Waste

Maine Department of Environmental Protection
- Bureau of Hazardous Materials & Solid Waste Control

DEP Regional Offices

Submerged Lands

Maine Department of Conservation
- Bureau of Public Lands

Unorganized Towns

- Districts and Regulations
- District zoning maps
- Lakes, rivers, streams and high mountain area maps

Maine Dept. of Conservation
Land Use Regulation Commission

Wetlands

- Maps
- Regulations
- Soils
- Federal laws

Maine Department of Environmental Protection
- Bureau of Land & Water Quality
- Division of Land Resource Regulation

Maine Department of Conservation
- Maine Geological Survey (maps)
- Land Use Regulation Commission (maps and regulations)
- Maine Natural Areas Program

U. S. Geological Survey (maps)

U. S. Army Corps of Engineers (federal laws and regulations)

U. S. Department of Agriculture
- Natural Resources Conservation Service (soils maps)

Wildlife

- Fisheries and wildlife management
- Endangered and threatened species)
- Deer yards
- Critical areas

Maine Department of Inland Fisheries & Wildlife
(fisheries and wildlife management, endangered and threatened species)

IF&W regional offices (fisheries and wildlife management, endangered and threatened species)

Maine Department of Conservation
- Maine Natural Areas Program (critical areas)

Maine Department of Conservation
- Land Use Regulation Commission (deer yards in unorganized territory)

VOLUME II

Agency Addresses and Phone Numbers

- **Maine Department of Environmental Protection**

Headquarters & Central Maine Office

State House Station #17
Augusta, ME 04333
(207) 287-2111
1-800-452-1942

Bureau of Remediation & Waste Management**Bureau of Land & Water Quality**

(The following divisions are found in the Bureau of Land & Water Quality.)

Division of Land Resource Regulation
Division of Water Resource Regulation
Division of Watershed Management
Division of Environmental Assessment

Northern Maine Regional Office

528 Central Drive
Presque Isle, ME 04769
(207) 764-0477

Eastern Maine Regional Office

106 Hogan Road
Bangor, ME 04401
(207) 941-4570

Southern Maine Regional Office

312 Canco Road
Portland, ME 04103
(207) 822-6300

- **Maine Department of Inland Fisheries & Wildlife**

Headquarters State House Station #41

Augusta, ME 04333
(207) 287-3371

IF&W Regional Offices:

Region A
RR #1, 328 Shaker Road
Gray, ME 04039
1-800-322-1333

Region B
RFD #1, Box 6378
Waterville, ME 04901
1-800-322-3606

Region C
68 Water Street
Machias, ME 04654

Fisheries 255-3772
Wildlife 255-4715

Region D
RFD #3, Box 3770
Farmington, ME 04938
Fisheries 778-3322
Wildlife 778-3324

Region E
P. O. Box 551
Greenville, ME 04441
695-3756

Region F
P. O. Box 66
Enfield, ME 04433
732-4131

Region G
P. O. Box 416
Ashland, ME 04732
435-3231
1-800-322-4011

- **Maine Department of Conservation**

Maine Forest Service

State House Station #22, Augusta, ME 04333
(207) 287-2791

Maine Geological Survey

State House Station #22, Augusta, ME 04333
(207) 287-2801

Bureau of Public Lands

State House Station #22, Augusta, ME 04333
(207) 287-3061

Land Use Regulation Commission

State House Station #22, Augusta, ME 04333
(207) 287-2631

Maine Natural Areas Program

State House Station #93, Augusta, ME 04333
(207) 287-8044

- **Maine Department of Human Services**

Division of Health Engineering

State House Station #10, Augusta, ME 04333
(207) 287-5338

- **Atlantic Sea Run Salmon Commission**
650 State Street, Bangor, ME 04401
941-4449

Federal Agencies

- **U. S. Department of Agriculture**
Natural Resources Conservation Service
5 Godfrey Drive, Orono, ME 04473
866-7241

County Natural Resource Conservation Services (NRCS) Offices/Soil & Water Conservation District Offices

- **Maine Soil & Water Conservation Districts**

Androscoggin Valley SWCD
27 Westminster Street, Lewiston, ME 04240
Phone: 783-9196
(Androscoggin-Sagadahoc)

Central Aroostook SWCD
Aroostook Ag Center Bldg.
744 Main Street, Presque Isle, ME 04769
Phone: 764-4153

St. John Valley SWCD
96 Market Street, Fort Kent, ME 04743
Phone: 834-3311
(Northern Aroostook)

Southern Aroostook SWCD
RR #3, Box 45, Houlton, ME 04730
Phone: 532-2087

Cumberland County SWCD
381 Main Street, Gorham, ME 04038
Phone: 839-7842

Franklin County SWCD
2 Park Street, Farmington, ME 04938
Phone: 778-4279

Hancock County SWCD
RFD 5, Box 508W, Ellsworth, ME 04605
Phone: 687-8663

Kennebec County SWCD
Federal Bldg., Room 408C, Augusta, ME 04330
Phone: 622-8250

Knox-Lincoln SWCD
191 Camden Road, Warren, ME 04864
Phone: 273-2005

Oxford County SWCD
1 Main St., South Paris, ME 04281
Phone: 743-7019

Penobscot County SWCD
970 Illinois Ave., Suite 2, Bangor, ME 04401
Phone: 941-8973

Piscataquis County SWCD
1073 W. Main St., Suite 7, Dover-Foxcroft, ME 04426
Phone: 564-2321

Somerset County SWCD
7 High St., Skowhegan, ME 04976
Phone: 474-8324

Waldo County SWCD
69 Northport Avenue, Belfast, ME 04915
Phone: 338-2320

Washington County SWCD
P.O. Box 121, Machias, ME 04654
Phone: 255-3995

York County SWCD
160 Cottage Street, Sanford, ME 04073
Phone: 324-7015

- **U. S. Geological Survey**
26 Ganneston Drive, Augusta, ME 04330
622-8208

- **National Oceanic & Atmospheric Administration**
6501 Lafayette Avenue, Riverdale, MD 20737
(301)436-6990

- **U. S. Army Corps of Engineers**
Maine Project Office
RR 2, Box 1855, Manchester, ME 04351
623-8367
623-8124

New England Regional Office
424 Trapelo Road, Waltham, MA 02254
1-800-343-4789



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